```
                          Welcome to DialogClassic Web(tm)
 Dialog level 04.12.02D
Last logoff:  13sep04 13:05:21
Logon file001 16sep04 15:35:15
          *** ANNOUNCEMENT ***
                    ***
--Connect Time joins DialUnits as pricing options on Dialog.
See HELP CONNECT for information.
                    ***
--SourceOne patents are now delivered to your email inbox
as PDF replacing TIFF delivery. See HELP SOURCE1 for more
information.
                    ***
--Important Notice to Freelance Authors--
See HELP FREELANCE for more information
                    ***
NEW FILES RELEASED
***F-D-C Gold/Silver Sheet (File 184)
***BIOSIS Toxicology (File 157)
***IPA Toxicology (File 153)
                    ***
UPDATING RESUMED
                    ***
RELOADED
***Toxfile (File 156)
 REMOVED
                    ***

     >>> Enter BEGIN HOMEBASE for Dialog Announcements <<<
     >>>    of new databases, price changes, etc.      <<<
                    ****
KWIC is set to 50.
HILIGHT set on as ' '
 * * * *

File   1:ERIC 1966-2004/Jul 21
       (c) format only 2004 The Dialog Corporation

      Set  Items  Description
      ---  -----  -----------
Cost is in DialUnits
?
B 155, 5, 73
       16sep04 15:35:36 User259876 Session D670.1
            $0.73    0.210 DialUnits File1
     $0.73  Estimated cost File1
     $0.08  INTERNET
     $0.81  Estimated cost this search
     $0.81  Estimated total session cost   0.210 DialUnits

SYSTEM:OS  - DIALOG OneSearch
  File 155:MEDLINE(R) 1951-2004/Sep W2
        (c) format only 2004 The Dialog Corp.
 *File 155: Medline has been reloaded. Accession numbers
have changed. Please see HELP NEWS 154 for details.
  File   5:Biosis Previews(R) 1969-2004/Sep W2
        (c) 2004 BIOSIS
  File  73:EMBASE 1974-2004/Sep W2
        (c) 2004 Elsevier Science B.V.

      Set  Items  Description
      ---  -----  -----------
?
S (SEQUENCE OR SITE) (W) (SPECIFIC (W) RECOMBINATION)
         1520212  SEQUENCE
```

```
         1163619  SITE
         2604188  SPECIFIC
          122101  RECOMBINATION
      S1    3444  (SEQUENCE OR SITE) (W) (SPECIFIC (W) RECOMBINATION)
?
S (INT (W) RECOMBINASE) OR (LAMBDA (W) INTEGRASE)
           16471  INT
            7692  RECOMBINASE
              14  INT(W)RECOMBINASE
           76537  LAMBDA
            6006  INTEGRASE
             313  LAMBDA(W)INTEGRASE
      S2     327  (INT (W) RECOMBINASE) OR (LAMBDA (W) INTEGRASE)
?
S S2 (S) (MAMMALIAN OR EUKARYOTIC OR MOUSE OR HUMAN)
             327  S2
          319440  MAMMALIAN
           84601  EUKARYOTIC
         1547936  MOUSE
        20305096  HUMAN
      S3      24  S2 (S) (MAMMALIAN OR EUKARYOTIC OR MOUSE OR HUMAN)
?
S S3 AND S1
              24  S3
            3444  S1
      S4      18  S3 AND S1
?
RD
...completed examining records
      S5       7  RD (unique items)
?
T S5/3,K/ALL

  5/3,K/1     (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2004 The Dialog Corp. All rts. reserv.

15564479   PMID: 14687564
 Phage integrases: biology and applications.
  Groth Amy C; Calos Michele P
  Department of Genetics, Stanford University School of Medicine, Stanford,
CA 94305-5120, USA.
  Journal of molecular biology (England)   Jan 16 2004,  335  (3)  p667-78,
ISSN 0022-2836   Journal Code: 2985088R
  Contract/Grant No.: DK58187; DK; NIDDK; HL68112; HL; NHLBI
  Document type: Journal Article; Review; Review, Tutorial
  Languages: ENGLISH
  Main Citation Owner: NLM
  Record type: Completed

  Phage integrases are enzymes that mediate unidirectional site - specific
   recombination  between  two  DNA  recognition  sequences,  the  phage
attachment  site, attP, and the bacterial attachment site, attB. Integrases
may be grouped into two major families, the...

... serine  family  are larger, use a catalytic serine for strand cleavage,
recognize  shorter attP sequences, and do not require host cofactors. Phage
integrases  mediate efficient site - specific  recombination between two
different  sequences  that  are  relatively  short,  yet  long enough to be
specific on a genomic scale. These properties give phage integrases growing
importance  for  the  genetic  manipulation  of  living eukaryotic cells,
especially  those  with  large genomes such as mammals and most plants, for
which  there  are  few  tools  for  precise  manipulation  of  the genome.
Integrases  of  the  serine  family  have been shown to work efficiently in
  mammalian  cells, mediating efficient integration at introduced att sites
```

or native sequences that have partial identity to att sites. This reaction has applications in areas such...

5/3,K/2 (Item 2 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

14438326 PMID: 10435105
Minicircle: an improved DNA molecule for in vitro and in vivo gene transfer.
Darquet A M; Rangara R; Kreiss P; Schwartz B; Naimi S; Delaere P; Crouzet J; Scherman D
UMR 133 CNRS/Rhone-Poulenc Rorer, Vitry sur Seine, France.
Gene therapy (ENGLAND) Feb 1999, 6 (2) p209-18, ISSN 0969-7128 Journal Code: 9421525
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

... marker. They are thus smaller and potentially safer than the standard plasmids currently used in gene therapy. They were obtained in E. coli by att **site - specific recombination** mediated by the phage lambda integrase, which was used to excise the expression cassette from the unwanted plasmid sequences. We produced two minicircles containing the luciferase or beta-galactosidase gene under the control of the strong **human** cytomegalovirus immediate-early enhancer/promoter. Comparing maximal differences, these minicircles gave 2.5 to 5.5 times more reporter gene activity than the unrecombined plasmid in the NIH3T3 cell line and rabbit smooth muscle cells. Moreover, injection in vivo into **mouse** cranial tibial muscle, or **human** head and neck carcinoma grafted in nude mice resulted in 13 to 50 times more reporter gene expression with minicircles than with the unrecombined plasmid...

5/3,K/3 (Item 3 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

13776030 PMID: 9472558
A new DNA vehicle for nonviral gene delivery: supercoiled minicircle.
Darquet A M; Cameron B; Wils P; Scherman D; Crouzet J
UMR 133 CNRS/Rhone-Poulenc Rorer, Vitry sur Seine, France.
Gene therapy (ENGLAND) Dec 1997, 4 (12) p1341-9, ISSN 0969-7128 Journal Code: 9421525
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

... not have such elements and are consequently safer as they exhibit a high level of biological containment. They are obtained in E. coli by att **site - specific recombination** mediated by the phage lambda integrase. The desired **eukaryotic** expression cassette, bounded by the lambda attP and attB sites was cloned on a recombinant plasmid. The expression cassette was excised in vivo after thermoinduction...

5/3,K/4 (Item 4 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

11715828 PMID: 11892009
Genetic manipulation of mouse embryonic stem cells by mutant lambda

integrase .
Christ Nicole; Droge Peter
Institute of Genetics, University of Cologne, Cologne, Germany.
Genesis (New York, N.Y. - 2000) (United States) Mar 2002, 32 (3) p203-8, ISSN 1526-954X Journal Code: 100931242
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

Genetic manipulation of mouse embryonic stem cells by mutant lambda integrase .
Mutant lambda integrases catalyze **site - specific recombination** reactions inside mammalian cells. Here we demonstrate that the integrase system can be used to eliminate resistance marker genes from the genome of mouse embryonic...

... of the resistance gene led to the expression of enhanced green fluorescence protein, which served as a means to sort out cells that had undergone **site - specific recombination** . Southern analysis and DNA sequencing confirmed that strand exchange reactions had occurred in the genome as expected. Hence, the integrase system may be used in...

5/3,K/5 (Item 5 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

10626397 PMID: 10698624
Site - specific recombination **in human cells catalyzed by phage** lambda integrase **mutants.**
Lorbach E; Christ N; Schwikardi M; Droge P
Institute of Genetics, University of Cologne, Weyertal 121, Cologne, D-50931, Germany.
Journal of molecular biology (ENGLAND) Mar 10 2000, 296 (5) p1175-81, ISSN 0022-2836 Journal Code: 2985088R
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

Site - specific recombination **in human cells catalyzed by phage** lambda integrase **mutants.**
... 218 (E174 K/E218 K), which do not require accessory factors, are proficient to perform intramolecular integrative and excisive recombination in co-transfection assays inside **human** cells. Intramolecular integrative recombination is also detectable by Southern analysis in **human** reporter cell lines harboring target sites attB and attP as stable genomic sequences. Recombination by wild-type Int, however, is not detectable by this method. The latter result implies that **eukaryotic** co-factors, which could functionally replace the prokaryotic ones normally required for wild-type Int, are most likely not present in **human** cells. Copyright 2000 Academic Press.

5/3,K/6 (Item 6 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

10436898 PMID: 10532317
Site - specific recombination **in mammalian cells expressing the** Int recombinase **of bacteriophage HK022.**
Kolot M; Silberstein N; Yagil E
Department of Biochemistry, Tel-Aviv University, Israel.
Molecular biology reports (NETHERLANDS) Aug 1999, 26 (3) p207-13,

ISSN 0301-4851 Journal Code: 0403234
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

Site - specific recombination **in mammalian cells expressing the** Int recombinase **of bacteriophage HK022.**
... and mouse embryo fibroblast cells (NIH3T3) transiently transfected with the recombinant plasmid express the integrase protein. Co-transfection of this plasmid with reporter plasmids for **site - specific recombination** and PCR analyses show that the integrase promotes site-specific integration as well as excision. These reactions occurred without the need to supply integration host factor and excisionase, the accessory proteins that are required for integrase-promoted **site - specific recombination** in vitro as well as in the natural host Escherichia coli.

5/3,K/7 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE

12241142 EMBASE No: 2003353361
New insight into site - specific recombination□from Flp□ **recombinase-DNA structures**
Chen Y.; Rice P.A.
Y. Chen, Dept. of Biochem./Molecular Biology, University of Chicago, Chicago, IL 60637 United States
AUTHOR EMAIL: yuchen@midway.uchicago.edu
Annual Review of Biophysics and Biomolecular Structure (ANNU. REV. BIOPHYS. BIOMOL. STRUCT.) (United States) 2003, 32/- (135-159)
CODEN: ABBSE ISSN: 1056-8700
DOCUMENT TYPE: Journal ; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 94

New insight into site - specific recombination□from Flp□ **recombinase-DNA structures**

The **lambda integrase** , or tyrosine-based family of site-specific recombinases, plays an important role in a variety of biological processes by inserting, excising, and inverting DNA segments. Flp, encoded by the yeast 2-mum plasmid, is the best-characterized **eukaryotic** member of this family and is responsible for maintaining the copy number of this plasmid. Over the past several years, structural and biochemical studies have...
MEDICAL TERMS (UNCONTROLLED): **site specific recombination**
?

Set	Items	Description
S1	3444	(SEQUENCE OR SITE) (W) (SPECIFIC (W) RECOMBINATION)
S2	327	(INT (W) RECOMBINASE) OR (LAMBDA (W) INTEGRASE)
S3	24	S2 (S) (MAMMALIAN OR EUKARYOTIC OR MOUSE OR HUMAN)
S4	18	S3 AND S1
S5	7	RD (unique items)

?
COST
16sep04 15:40:04 User259876 Session D670.2
$1.42 0.443 DialUnits File155
$1.26 6 Type(s) in Format 3
$1.26 6 Types
$2.68 Estimated cost File155
$3.31 0.590 DialUnits File5
$3.31 Estimated cost File5
$3.52 0.359 DialUnits File73
$2.70 1 Type(s) in Format 3

```
          $2.70  1 Types
      $6.22  Estimated cost File73
             OneSearch, 3 files,  1.392 DialUnits FileOS
      $1.25  INTERNET
     $13.46  Estimated cost this search
     $14.27  Estimated total session cost   1.601 DialUnits
?
```

Return to logon page!